

nated product off the shelf and destroyed, cost of replacing contaminated products, and transportation costs. It does not cover other indirect costs or losses due to the product recall or an outbreak warning, such as third party expenses, loss of profit, and business interruption losses. Third-party expenses refer to those costs that occur when a downstream retailer loses business as a result of the contamination.² Loss of profit refers to instances when the product recall or warning damages consumer confidence in the grower, negatively affecting revenues in the current or next business cycle. Business interruption losses are those losses resulting from a period where the growers' operations shut down.

An important issue to consider in the purchase of product recall insurance is that it covers recall costs only for growers responsible for contamination or outbreak. For those growers that were not a source of contamination but whose products were also taken off the shelf as a precaution, recall losses may not be covered. This can be a problem if, for example, no government entity officially traced or narrowed the source of the contamination (Odza, 2008).

Accidental or Product Contamination Policy

A more comprehensive policy that covers both the direct and indirect costs of product recall is the accidental or product contamination policy. It also insures growers against claims resulting from their own unintentional distribution of a product deemed unsafe. However, as with the product recall policy above, this coverage applies only to those growers whose product was contaminated. Those growers who suffered loss of profit or business interruption losses but were not contaminated (their product was rejected as a precaution or due to a market scare) typically will not be covered under this policy.

Malicious Tampering Insurance

Malicious tampering insurance is a more comprehensive insurance policy that covers losses from criminal actions of sabotage against the grower, as well as the losses covered in the accidental or product contamination policy (the indirect and direct recall costs). An example of a private company that sells this type of comprehensive coverage is MRM MacDougall Risk Management (Skees et al., 2001).³ Damages due to malicious product tampering are indemnified for up to \$75 million, while damages due to accidental product contamination are indemnified for up to \$50 million. Under the accidental contamination provision of the policy, losses are categorized into four areas: (1) recall expenses, (2) lost gross profit, (3) rehabilitation expenses, and (4) crisis response. The second category covers loss for "12 months following discovery" or lost profit during a shorter period when the sales revenue

remains lower than would have been reasonably projected had the product contamination not occurred. Indemnities are even paid to rebuild the lost market share. Table 1 (see back cover) provides examples of other companies that offer product recall insurance, accidental contamination insurance, malicious tampering insurance, and combinations thereof. Again, the shortcoming of this product, as with the product recall and accidental contamination, is that it applies only to growers whose product was contaminated.

Combination Policies

Some insurance companies offer combination or package policies. For example, the general farm liability policy and commercial business coverage can be combined with a homeowner's policy. A combination policy makes sense for growers whose farms have both residential and commercial characteristics. Such policies are especially appropriate for family- and individually-operated farms (rather than large corporate farming operations). Combination policies generally offer the additional advantage of a lower premium than for two policies purchased separately.

Excess/Umbrella/Surplus Lines of Insurance

Excess/Umbrella/Surplus lines of insurance are the terms used to describe insurance coverage that provides catastrophic loss protection when the underlying insurance is inadequate. For example, there are some risks that North Carolina-licensed insurance companies may not cover. The excess or surplus lines market is an insurance marketplace for unique or hard-to-place risks. For fresh produce growers, these excess or surplus lines provide additional protection above and beyond the losses covered under other policies. An excess or surplus insurance policy can be tailored to protect against losses from foodborne illness outbreaks even when the grower's product is not contaminated. The disadvantage of these types of policies is that premium rates are not regulated under state laws, and the Insurance Guaranty Association offers no protection for companies that sell these lines. Therefore, if the surplus lines insurer has financial difficulties, claims against the policy might not be paid. Note that product liability insurance in North Carolina sometimes falls under excess or surplus lines of insurance.

Adjusted Gross Revenue (AGR) or Adjusted Gross Revenue-Lite (AGR-Lite) Crop Insurance

All of the insurance policy options discussed so far are private-industry provided (and underwritten), and these policies are not a part of the government-supported Federal Crop Insurance (FCI) program.⁴ Except for the excess/surplus lines, these privately provided insurance options cover only losses related to food-

²Third party expenses may also include the liability the grower faces from downstream retailers whose brand names may be tarnished as a result of the contaminated fresh produce supplied to them.

³This policy is underwritten by Lloyd's of London.

⁴The FCI program is overseen by the United States (US) Dept. of Agriculture Risk Management Agency (USDA-RMA). This is a publicly supported, privately delivered program that provides insurance products that help protect farmers from yield/revenue losses due to natural perils (such as drought or flood.). AGR and AGR-Lite are offered under this program. AGR-Lite is currently available in North Carolina.